WHAT IS CLAIMED IS:

1. A semiconductor device comprising:

a semiconductor substrate having a main surface;

an interlayer insulation film formed on said main surface of said semiconductor substrate and having a top surface and a hole reaching said semiconductor substrate;

a conductive film having a side surface and a top surface ranging from said side surface and having a larger distance from said main surface of said semiconductor substrate than a distance from the main surface of said semiconductor substrate to said top surface of said interlayer insulation film, said conductive film filling said hole;

a bottom electrode disposed in contact with said top and side surfaces of said conductive film;

a dielectric film disposed on said bottom electrode; and

a top electrode disposed on said dielectric film.

2. The semiconductor device according to claim 1, wherein said conductive film includes a barrier metal layer disposed in contact with said bottom electrode and containing at least one selected from the group consisting of titanium, tantalum, titanium nitride, tantalum nitride, titanium-tungsten, tungsten nitride, tungsten-titanium nitride, zirconium nitride and titanium oxinitride, and said bottom electrode contains metal.

3. The semiconductor device according to claim 1, wherein said conductive film includes a barrier metal layer disposed in contact with said bottom electrode and having a portion formed to fill said hole.

4. The semiconductor device according to claim 1, wherein a portion of said conductive film contacting said bottom electrode has an uneven geometry.

5. The semiconductor device according to claim 1, wherein said

conductive film has a recess having an opening at said top surface of said conductive film and said bottom electrode is formed to fill said recess.

6. A semiconductor device comprising:

a semiconductor substrate having a main surface;

an interlayer insulation film formed on said main surface of said semiconductor substrate and having a top surface and a hole reaching said semiconductor substrate;

a conductive film having a top surface having a larger distance from said main surface of said semiconductor substrate than a distance from the main surface of said semiconductor substrate to said top surface of said interlayer insulation film, said conductive film filling said hole, said conductive film having a base formed on said top surface of said interlayer insulation film, and a sidewall ranging from said base and extending away from said main surface of said semiconductor substrate;

a bottom electrode disposed on said interlayer insulation film in contact with said base and said sidewall;

a dielectric film disposed on said bottom electrode; and

a top electrode disposed on said dielectric film.

7. The semiconductor device according to claim 6, wherein said conductive film includes a barrier metal layer disposed in contact with said bottom electrode and containing at least one selected from the group consisting of titanium, tantalum, titanium nitride, tantalum nitride, titanium-tungsten, tungsten nitride, tungsten-titanium nitride, zirconium nitride and titanium oxynitride, and said bottom electrode contains metal.

8. The semiconductor device according to claim 6, wherein said conductive film includes a barrier metal layer disposed in contact with said bottom electrode and having a portion formed to fill said hole.

9. The semiconductor device according to claim 6, wherein a portion of said conductive film contacting said bottom electrode has an

uneven geometry.

10. The semiconductor device according to claim 6, wherein said conductive film has a recess having an opening in a plane contacting with said bottom electrode and said bottom electrode is formed to fill said recess.

11. A semiconductor device comprising:

a semiconductor substrate having a main surface;

an interlayer insulation film disposed on said main surface of said semiconductor substrate and having a top surface and first and second holes reaching said semiconductor substrate;

first and second conductive films filling said first and second holes, respectively;

first and second bottom electrodes extending away from said top surface of said interlayer insulation film, each having a portion with a top surface, and disposed in contact with said first and second conductive films, respectively;

an insulator disposed at said portion adjacent to the top surfaces of said first and second bottom electrodes and having one end connected to said first bottom electrode and the other end connected to said second bottom electrode;

a dielectric film disposed on said first and second bottom electrodes and;

a top electrode disposed on said dielectric film.

12. The semiconductor device according to claim 11, wherein said insulator has a top surface and said top surface of said insulator and said top surface of said first and second bottom electrodes are substantially in a single plane.